

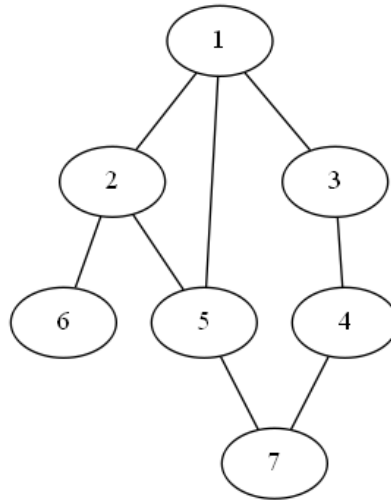
Name Alex Johnson

Date: 10/3/19

Pledge: I pledge my honor that I have abided by the Stevens Honor System.

For each of the graphs below, list the order in which the vertices are visited in a **breadth-first search**, starting with vertex 1. If there are multiple vertices adjacent to a given vertex, visit the adjacent vertex with the lowest value first. Then repeat the process for **depth-first search**.

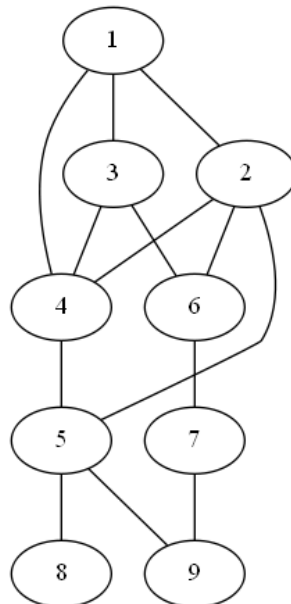
1.



BFS: 1,2,3,5,6,4,7

DFS: 1,2,5,7,4,3,6

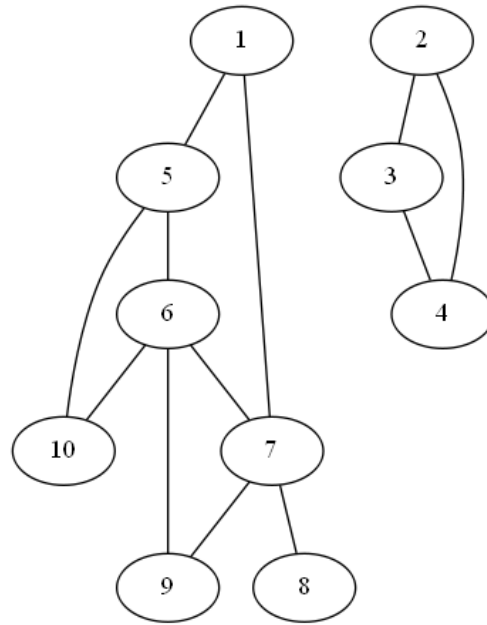
2.



BFS: 1,2,3,4,5,6,8,9,7

DFS: 1,2,4,3,6,7,9,5,8

3.

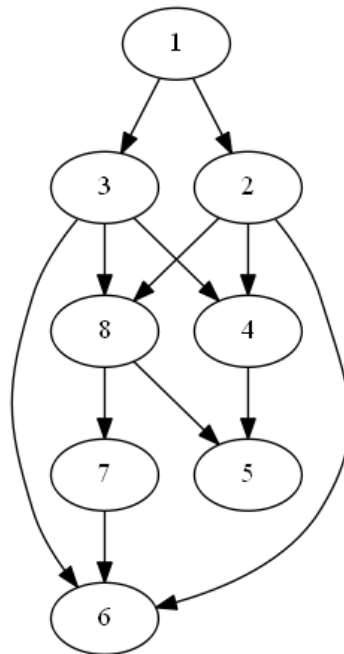


BFS: 1,5,7,6,10,8,9,2,3,4

DFS: 1,5,6,7,8,10,9,2,3,4

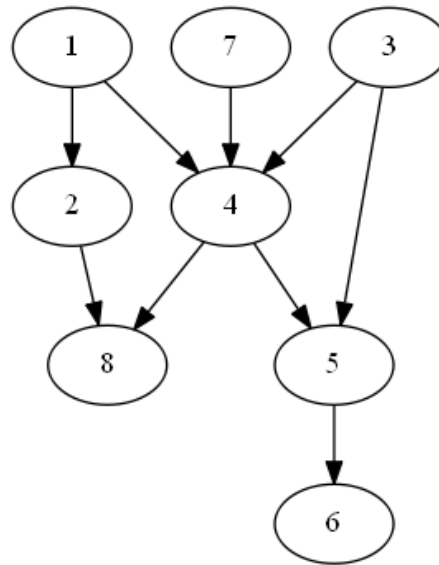
For each of the graphs below, list the order in which the vertices are visited in a **topological sort**, starting with vertex 1. If there are multiple vertices adjacent to a given vertex, visit the adjacent vertex with the lowest value first.

4.



Topological sort: 1,2,3,4,8,5,7,6

5.



Topological sort: 1,2,3,7,4,5,6,8